IN THE CLAIMS

Please amend claims 1-3 and 11 as follows:

1. (Currently Amended) A wrap spring clutch comprising:

a drive shaft with a shoulder and a hub, all configured to rotate about an axis;

an output ~~hub~~member mounted over the drive shaft, the output ~~hub~~member configured with a first groove;

a wrap spring helically wrapped about the drive shaft and over the hub, the wrap spring having a first wrap end and a second wrap end, wherein the first wrap end is press fit into the first groove;

a bushing mounted over the drive shaft, the bushing having a first portion and a second portion, wherein the first portion is coupled between the drive shaft and the second wrap end; and

a control ring mounted over the drive shaft and fixed to the second portion of the bushing thereby defining a second groove and also thereby press fitting the second wrap end into the second groove~~into which the second wrap end is press fit~~, wherein the control ring is controllably pulled against the shoulder thereby causing the wrap spring to wrap down onto the hub such that the drive shaft and output ~~hub~~member rotate together.

2. (Currently Amended) The wrap spring clutch of claim 1 wherein the drive shaft, the shoulder and ~~a~~the hub are all configured as a single part.

3. (Currently Amended) The wrap spring clutch of claim 1 wherein the drive shaft, the shoulder and ~~a~~the hub are all configured as individual parts and assembled together.

4. (Original) The wrap spring clutch of claim 1 wherein the wrap spring is fully helical having no tang or spring toe at either the first or second wrap end.

5. (Original) The wrap spring clutch of claim 1 wherein the wrap spring has a height in a perpendicular direction relative to the axis of the shaft thereby defining a wrap spring surface, wherein the second portion of the bushing has a height in a perpendicular direction relative to the axis of the shaft thereby defining a bushing surface, and wherein the bushing surface is closer to the axis of the shaft than is the wrap spring surface.

6. (Original) The wrap spring clutch of claim 5 wherein control ring is fixed to the bushing surface such that the control ring presses against the wrap spring surface thereby creating the press fit over the second wrap end.

7. (Original) The wrap spring clutch of claim 1 further including a tube mounted over the drive shaft, the bushing, the wrap spring and the control ring, and a case mounted over the tube.

8. (Original) The wrap spring clutch of claim 7 further including a coil wound about the tube and generally perpendicular to the tube and case such that when electrical current flows in the coil, an electromagnetic field is established in the tube and case.

9. (Original) The wrap spring clutch of claim 8 wherein the tube and case are separated by a gap adjacent the control ring such that the electromagnetic field is established through the control ring thereby causing the control ring to be pulled against the shoulder.

10. (Original) The wrap spring clutch of claim 1, wherein the wrap spring is axially flexible such that it flexes to allow the bushing and the control ring to move axially against the shoulder when electrical current flows in the coil.

11. (Currently Amended) A wrap spring clutch comprising:

a drive shaft with a shoulder and a hub all configured to rotate about an axis;

an output ~~hub~~member mounted over the drive shaft, the output ~~hub~~member configured with a first groove;

a wrap spring helically wrapped about the drive shaft and over the hub, the wrap spring having a first wrap end and a second wrap end, wherein the first wrap end is press fit into the first groove; and

control means mounted over the drive shaft for providing a second groove into which the second wrap end is press fit, wherein the control means is controllably pulled against the shoulder thereby causing the wrap spring to wrap down onto the hub such that the drive shaft and output ~~hub~~member rotate together.

12. (Original) The wrap spring clutch of claim 11, wherein the control means includes a bushing and a control ring mounted over the drive shaft, wherein the control ring is coupled to the bushing thereby defining the second groove into which the second wrap end is press fit.

13. (Original) The wrap spring clutch of claim 12, wherein the bushing has a first portion and a second portion, wherein the first portion is coupled between the drive shaft and the second wrap end, and wherein the control ring is coupled to the second portion of the bushing.

14. (Original) The wrap spring clutch of claim 11 wherein the wrap spring is fully helical having no tang or spring toe at either the first or second wrap end.

15. (Original) The wrap spring clutch of claim 13 wherein the wrap spring has a height in a perpendicular direction relative to the axis of the shaft thereby defining a wrap spring surface, wherein the second portion of the bushing has a height in a perpendicular direction relative to the axis of the shaft thereby defining a bushing surface, and wherein the bushing surface is closer to the axis of the shaft than is the wrap spring surface.

16. (Original) The wrap spring clutch of claim 15 wherein control ring is fixed to the bushing surface such that the control ring presses against the wrap spring surface thereby creating the press fit.

17. (Original) The wrap spring clutch of claim 11 further including a tube mounted over the drive shaft, the control means, and the wrap spring, and a case mounted over the tube.

18. (Original) The wrap spring clutch of claim 17 further including a coil wound about the tube and generally perpendicular to the tube and case such that when electrical current flows in the coil, an electromagnetic field is established in the tube and case.

19. (Original) The wrap spring clutch of claim 18 wherein the tube and case are separated by a gap adjacent the control ring such that the electromagnetic field is established through the control ring thereby causing the control ring to be pulled against the shoulder.

20. (Original) The wrap spring clutch of claim 11, wherein the wrap spring is axially flexible such that it flexes to allow the control means to move axially against the shoulder when electrical current flows in the coil.